

to fly, possibly as an adaptation to living in a linear habitat where flying in a strong wind could lead to loss of contact with the habitat. The Sandhill Rustic may have adapted to life in a wind-blown habitat by flying only when the wind is light. In fact, the moths rarely took to the wing when disturbed and those I marked with red felt-tip pen walked in circles in the sand instead of flying away. 6.47% (24) of the moths seen had deformed wings and were unable to fly.

That Sandhill Rustics do fly is shown by the numbers that I caught at light. On 4.ix.1988, at the height of the flight period, I placed a Heath trap in the middle of the site. The wind was slight, possibly about Force 2 and the minimum temperature was 13.5°C at 6.45am. I caught several moth species, including 15 *Luperina testacea*, but the commonest moth was the Sandhill Rustic (20 caught). Of these, one was a previously marked female, three were previously marked males and 16 were males caught for the first time, including two which were darker than usual. Three days later, I ran an m.v. lamp on a white sheet. This time, the wind was strong and I caught no Sandhill Rustics, only *Autographa gamma*, *Tholera decimalis* and *Luperina testacea*. Either the wind was too strong, or Sandhill Rustics are reluctant to come to m.v. lamps.

Males appear to fly and come to light more readily than females. At the Heath trap on 4.ix.1988, the ratio of males to females was 19:1. Females rarely seem to fly and they crawl to their daytime resting places. A tendency to fly may be an evolutionary disadvantage for females, which seem to rest on the foodplant waiting for males to arrive. In the survey period, I found seven females resting on plants other than the foodplant and these females would have to move before they could lay their eggs. For the other females, it would be possible to mate and lay eggs without leaving the foodplant. In fact, *Elymus farctus* is a rhizomic plant, forming large clumps joined underground by a lengthy root system and when the larvae feed on the roots after winter they could travel a great distance on the roots of a single plant clump.— ADRIAN SPALDING, Lerryn Cottage, Lerryn, Lostwithiel, Cornwall PL22 0QB.

Distribution Mapping with IBM-compatible Personal Computers

DMAP is a computer program which is available for producing Distribution Maps and Coincidence Maps on IBM-compatible PCs (e.g. Amstrad PCs). It runs on all true compatibles with all commonly fitted graphics displays (e.g. Hercules, CGA, EGA and VGA). Maps are displayed on the screen (in colour for EGA and VGA) and can be printed on a wide range of printers including ordinary dot-matrix printers, inkjet printers, laser printers, and PostScript laser printers. Maps can also be generated as PC-Paintbrush or Encapsulated PostScript files for importing into Desk-Top Publishing packages.

DMAP reads data files which contain grid references defining the species distributions and study area boundaries. A wide range of grid reference

formats is accepted, including tetrad codes. A variety of symbol types is available for plotting the distributions, and text can also be displayed on the maps. The scale of mapping and the size of symbols can be fully controlled, thus allowing distribution mapping at site, county, regional, or national scale.

Data entry can be by a simple text editor (one is supplied), a simple database program supplied with DMAP, or alternatively, DMAP can be linked to a database written in a database language such as dBASE or Advanced Revelation.

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Notes on two British *Bagous* spp. (Col.: Curculionidae)

B. diglyptus Boh.: in Shirt (ed.), 1987, British Red Data Books: 2: Insects: 248, the Norfolk Broads is one of three localities given for this extremely rare *Bagous*. I know of two alleged records for this area, but both have been found to refer to other species. *B. diglyptus* was recorded from Sutton Broad in Fowler & Donisthorpe, 1913, *Col. Brit. Isl.* 6: 311, as taken by Chitty and Donisthorpe; however, in 1935, (Blair, *Ent. mon. Mag.* 71: 250), in adding the true *B. frit* (Hbst.) to our list, pointed out that this and not *B. diglyptus* was the species actually taken there. Again, Sharp had in 1917 (*ibid.* 53: 106) mentioned a specimen supposed to be *diglyptus* in the A.J. Chitty collection at Oxford, from Stalham Broad, 8.vi.1906, which he could not reconcile with the descriptions; this I examined in 1963 and made it out to be a large example of *B. longitarsis* Thoms. If there is a genuine Norfolk record of *B. diglyptus*, it would be interesting to have details. It is perhaps not well known that there are two Suffolk records of this species: Ipswich, near the R. Gipping, from dead reeds (Morley, 1897, *Entomologist's mon. Mag.* 33: 44) — I believe that he later took a second specimen at the same spot — and Brandon, one from a ditch (P. Harwood, in whose collection I have seen it).

B. longitarsis Thoms. is a species I believe to be rather more widespread than the very few records suggest, and not quite so rare as supposed. Its headquarters here is the Romney Marsh area of S.E. Kent, but it has occurred also in the extreme east of W. Kent. I took one specimen in April 1948 and several in June 1949 at Allhallows-on-Sea, by the side of a little brackish ditch apparently devoid of vegetation but very good for Bagoi. I failed, however, to find it in the Higham Marshes below Gravesend where, when conditions were right, I have had seven species of *Bagous* together in the sweep-net. It should occur in East Anglia, and indeed if my re-determination of the Chitty "*diglyptus*" as *longitarsis* is correct (see above), it has — Stalham Broad, Norfolk. I can further add E. Sussex: Rye (not far west of the Romney district), a series in coll. Donisthorpe standing as "*claudicans* Boh."; and Surrey: Woking (Champion), in coll. Power, standing as *arduus* Sharp.